

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 1-21 were pending in this application. No claims have been amended or cancelled and new claims 21-26 have been added. Accordingly, claims 1-26 will be pending herein upon entry of this Amendment. For at least the reasons stated below, Applicant respectfully submits that all claims pending in this application are in condition for allowance.

In the Office Action mailed June 14, 2005, the Examiner made final the restriction requirement and rejected claims 1-15 under 35 U.S.C. §103(a) as being unpatentable over Horning et al. in view of Ohnstein. To the extent these rejections might still be applied to claims presently pending in this application, they are respectfully traversed.

Regarding the election requirement, Applicants respectfully disagree with the Examiner's characterization of the independent claims as mutually exclusive. The lack of mutual exclusivity is evidenced by the fact that recitations from the independent claims withdrawn by the Examiner now appear in claims 22 and 23 as dependent claims from the allegedly mutually exclusive subject matter of claim 1. The fact that such recitation could be dependent from claim 1 belie the Examiner's characterization of these claims as mutually exclusive. Further, Applicants also disagree with the Examiner's inaccurate assumptions as to what Applicants believe regarding the supposed separateness of this invention. Applicants maintain that the subject matter of claims 16-21 has been improperly restricted and given the addition of claims 22 and 23 as dependent claims, Applicants believe the Examiner clearly has an obligation to search for the subject matter

of claims 16-21 as well. Accordingly, Applicants maintain that the restriction/election requirement should be withdrawn.

As to the rejection under 35 U.S.C. § 103(a), Applicants assert that the Examiner has failed to meet his burden of establishing a *prima facie* case of obviousness. In order to maintain an obviousness rejection, the Examiner is required to provide motivation for the combination of references. *See generally* MPEP 2143. In this instance, the Examiner has merely stated that “[i]t would have been obvious to a person of ordinary skill in the art at the time of the invention to construction [sic] the actuator of Horning with the dielectric and conductive layers being circular films with an egress hole to form a valve with a mating surface between the electrodes.” This statement provides no explanation as to what motivation would be used to combine two pieces of prior art that are not even from similar fields, as evidenced by the lack of crossover of classification in both the US and International classification systems between the two pieces of cited art. The mere use of “level of skill in the art cannot be relied upon to provide the suggestion to combine references.” MPEP 2143.01 (citing *Al-Site Corp. v. VSI Int’l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999)).

Turning more specifically to support for the lack of motivation, as mentioned above, the two references do not even overlap in their classifications. Further, Ohnstein is a microvalve for regulating flow of a fluid through the valve, whereas Horning is a microactuator concerned with, at least in one aspect, providing macroscopic force and displacement. While Ohnstein may disclose an oval-shaped valve, the function of the valve has nothing to do with force generation or displacement as taught in both Horning and the present application. Applicants assert that one of skill in the art would not look to a microvalve concerned with regulating fluid flow for

potential modifications or improvements upon a microactuator. Other than containing the prefix "micro," these two references have essentially nothing in common.

Further to that point, Ohnstein teaches a silicon microvalve manufactured using standard semiconductor manufacturing techniques of depositing various materials and then etching away undesired portions. The present invention, as with Horning, moves entirely away from semiconductor manufacturing techniques and utilizes flexible polymer sheets bonded together to form the microactuator. These two fields of endeavor simply do not overlap to allow the combination as suggested by the Examiner. Accordingly, Applicants respectfully submit that one of skill in the art would not look to a field such as etched microvalves for manners of modifying microactuators concerned with force and displacement generation and made of bonded polymer sheets.

Although Applicants also maintain that the combination of Horning with Ohnstein still would not result in the invention claimed in any of the presently pending independent claims or dependent claims, Applicants have added claims 24-26 to further distinguish the present invention from the teaching of Ohnstein and Horning. As stated above, Ohnstein teaches a microvalve for regulating flow of fluid *through* the device. Claims 24-26 are added to elucidate the fact that the claimed egress hole is not for fluid flow *through* the device, but to allow fluid to both evacuate and refill the cell as needed during the functioning of the actuator. Such evacuation, does not require flow from one side of the cell to the other as is required in Ohnstein.

In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is

Serial No.: 10/673,453
Art Unit: 2834


Attorney's Docket No.: H0004181-16331633
Page 10

desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone applicants' undersigned representative at the number listed below.

PILLSBURY WINTHROP SHAW PITTMAN LLP
1650 Tysons Boulevard
McLean, VA 22102
Tel: 703/770-7900

Respectfully submitted,

Date: September 14, 2005

By:  Reg # S2,000
Lawrence D. Eisen
Registration No. 41,009

LDE/BCM/dkp

Customer No. 00128

PLEASE CONTINUE TO SEND OFFICIAL CORRESPONDENCE TO:

HONEYWELL INTERNATIONAL, INC.
101 COLUMBIA ROAD
MORRISTOWN, NJ 07962